

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

- 1-22 (Cancelled).
23. (New) A motion detector device comprising:
- a substrate having a first surface and a second surface;
 - a first light pipe extending within said substrate from a first location on said first surface to a second location on said first surface, said first light pipe transmitting light from said first location to said second location.
24. (New) The motion detector device of Claim 23, further comprising:
- a second light pipe extending within said substrate from said first location on said first surface to a third location on said second surface, said second light pipe transmitting light from said first location to said third location.
25. (New) The motion detector device of Claim 23, further comprising:
- a second light pipe extending within said substrate from a third location to a fourth location, said second light pipe transmitting light from said third location to said fourth location, said third location disposed on one of said first surface and said second surface, said fourth location disposed on one of said first surface and said second surface.

26. (New) The motion detector device of Claim 23, further comprising:

a second light pipe extending within said substrate from a third location on said first surface to a fourth location and a fifth location, said second light pipe transmitting light from said third location to said fourth and fifth locations.

27. (New) The motion detector device of Claim 23, further comprising:

a second light pipe extending within said substrate from a third location and a fourth location to a fifth location, said second light pipe transmitting light from said third and fourth locations to said fifth location.

28. (New) The motion detector device of Claim 23 wherein said substrate and said first light pipe are made of the same material, further comprising:

a refractive index boundary disposed between at least a portion of said substrate and said first light pipe.

29. (New) The motion detector device of Claim 23 wherein said substrate is selected from the group consisting essentially of pre-fabricated wall, ceiling and flooring tiles, made in place tiles, other floor coverings, façade panels, pavers, bricks, siding, roofing, glass blocks, concrete blocks, furniture panels, cabinetry panels, countertops, fabrics, rugs, carpets, wall coverings, room partitions, furniture, upholstery, window treatments, lighting fixtures, billboards, signage, displays, lane dividers, approaching object alerts, parking guides, fountains, aquariums, fish tanks, tubs, pools, spas, credit cards, business cards, mouse pads, novelty items, and combinations thereof.

30. (New) The motion detector device of Claim 23, further comprising:
a non-ambient light source in light communication with said first location of
said first light pipe.

31. (New) The motion detector device of Claim 30 wherein said non-ambient
light source is a light source selected from the group consisting essentially of a UV light
source, an IR light source , a visible light source, and combinations thereof.

32. (New) A method of making an article of manufacture, comprising:
creating a refractive index boundary between a first material and a
substrate forming at least one light pipe contained within said substrate transmitting light
from a first location on a first surface of said substrate to a second location on said first
surface of said substrate.

33. (New) The method of Claim 32 wherein said creating a refractive index
boundary between a material and a substrate forming at least one light pipe contained
within said substrate comprises casting an uncured substrate material, having a first
refractive index, around transparent material, having a second refractive index.

34. (New) The method of Claim 32 wherein said creating a refractive index boundary between a first material and a substrate comprises creating a refractive index boundary between a first material and a substrate selected from the group consisting essentially of concrete, plastic, silicones, thermoplastics, thermosets, ceramics, composites, and combinations thereof.

35. (New) The method of Claim 32 wherein said creating a refractive index boundary between a first material and a substrate comprises creating a refractive index boundary between a first material and a substrate selected from the group consisting essentially of a woven fabric, a non-woven fabric, and combinations thereof.

36. (New) A light distributing material, comprising:
at least one light pipe having a first end pointing in a first direction and a second end pointing in a second direction; and
a matrix formed about said at least one light pipe, said at least one light pipe being embedded within said matrix such that said first end is substantially coplanar with a first exposed surface of said matrix and said second end is substantially coplanar with said first exposed surface of said matrix, said at least one light pipe transmitting light from said first end to said second end.

37. (New) The material of Claim 36 wherein said matrix is concrete and said light pipes reinforce said concrete in tension.

38. (New) A method of detecting motion of an object, said method comprising:
transmitting light through a first light pipe at least partially contained in a substrate from a first location on a first surface of said substrate to a second location resulting in a first signal;
distorting said first light pipe under a force from the object thereby interfering with said transmitting said light through said first light pipe thereby resulting in a second signal, said second signal being different than said first signal; and
detecting said difference between said second signal and said first signal.

39. (New) The method according to Claim 38 wherein said transmitting light through a light pipe at least partially contained in a substrate from a first location on a first surface of the substrate to a second location comprises transmitting light through a light pipe extending within said substrate from said first location on said first surface to a second location on said first surface.

40. (New) The method according to Claim 38, further comprising:
transmitting light through a second light pipe extending within said substrate from said first location on said first surface to a third location on a second surface of said substrate.

41. (New) The method according to Claim 38, further comprising:

transmitting light through a second light pipe extending within said substrate from a third location to a fourth location, said third location disposed on one of said first surface and a second surface of said substrate, said fourth location disposed on one of said first surface and said second surface.

42. (New) The method according to Claim 38, further comprising:

transmitting light through a second light pipe extending within said substrate from a third location on said first surface to a fourth location and a fifth location.

43. (New) The method according to Claim 38, further comprising:

transmitting light through a second light pipe extending within said substrate from a third location and a fourth location to a fifth location.

44. (New) The method according to Claim 38 wherein said transmitting light through a first light pipe comprises transmitting light selected from the group consisting essentially of UV light, IR light, visible light, and combinations thereof through said first light pipe.